

Dr. Peterson
Select USA Investment Summit
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Opening Comments:

Good afternoon. We're glad that you joined us. It's a bit humbling to follow the President of the United States, but we are excited to talk about the topic of this session: "America's Universities: Partnering with the World's Leading and Research Institutions." Here with me today are Anne Whitaker, President of North America Pharmaceuticals at Sanofi, a diversified global healthcare company, and Dr. Patrick O'Shea, VP and Chief Research Officer of the University of Maryland.

Today we've heard about many of the strengths that make America the most appealing investment market in the world. The U.S. is a stable and innovative market, responsible for 28 percent of the total world R&D expenditures. It also has some of the most outstanding universities in the world. An innovation-based economy is increasingly dependent upon outstanding research, development, and technology transfer—much of which is supplied by universities—and an effective strategy to integrate all three into the university of the future.

There are a number of areas where research universities have partnered with business and industry to develop innovative solutions to grand challenges that we all face. By combining people resources at universities and natural resources in the U.S., we have an appealing environment for both foreign and domestic investment. Take energy, as an example. Universities like Georgia Tech are helping to facilitate the development of a clean and diverse portfolio of domestic energy supplies that could support our energy needs now and in the future. The U.S. is fortunate to have an abundant supply of natural gas, and has experienced a dramatic decrease in energy costs. I believe that this month it is at \$3.66 per million British thermal units, or BTUs. The price to convert to a liquid composite for exporting is triple to quadruple that. When you consider the increase in the long-term sustainable supply of natural gas through technological

innovation combined with other energy resources, it makes the U.S. an attractive environment for investors worldwide, especially for advanced and energy-intensive activities.

Many of America's outstanding research universities partner with business and industry from throughout the world in everything from research to launching startups and innovation centers, as well as preparing students to enter the workforce in our global environment.

In September I participated in a collaborative leadership summit in Atlanta called (co)lab. The closing speaker was Thomas Friedman, author, reporter, and columnist for the New York Times. He talked about the merger of globalization and the IT revolution, taking the world from connected to hyper connected to interdependent. When doing research in 2011 for his book "That Used to Be Us," he went back to the first edition of his book "The World is Flat," which he started in 2004. He said something that illustrates the rapid changes in technology. And I quote:

- When I was running around saying The World is Flat: we're all connected!
 - Facebook didn't exist,
 - twitter was still a sound,
 - the Cloud was still in the sky,
 - 4-G was a parking place,
 - Linked in was a prison,
 - applications were what you sent to college
 - Big Data was a rap star, and
 - Skype was a typo.

Technology that is state-of-the-art when our students are freshmen is out of date by the time they graduate. Ever-changing technology impacts the way we educate our students and it facilitates global partnerships.

Today we're going to talk about some of the exciting partnerships between universities and business and industry, and as well as resources available to help startups thrive and global operations to expand. Then we'll invite you into the conversation.

(Introduce Anne Whitaker)

A dedicated healthcare leader with more than 20 years of experience, Anne began her pharmaceutical career at the Upjohn Company in 1991 as a metabolic disease specialist. She spent 19 years at GlaxoSmithKline in roles of increasing importance throughout the commercial organization.

Anne joined Sanofi in 2011 as President of North America Pharmaceuticals and CEO of Sanofi US. For the past two years with a dynamic and evolving healthcare market, she has focused her team on delivering sustainable growth by meeting the needs of the patient.

Anne oversees all operations within the region including the Diabetes, Oncology, Cardiovascular and other Patient Centered Units, Market Access, U.S. Medical Affairs, Commercial Strategy & Planning, Commercial Excellence, Chattem (Consumer Healthcare), and Canada Pharmaceuticals.

(Anne speaks)

(Introduce Dr. Patrick O'Shea)

As Vice President and Chief Research Officer of the University of Maryland, College Park, Professor Patrick O'Shea is responsible for the university's \$500M per annum research, innovation and economic development programs. As a committed champion of economic diversification in Maryland, Pat played a leading role in establishing the Maryland Innovation Initiative, and University of Maryland Ventures, designed to promote commercialization of university research, and to support start-up companies across the state. Prior to being appointed CRO, he held a number of leading positions

including Chair of the Department of Electrical and Computer Engineering, Executive Director of the Center for Applied Electromagnetics, Director of the Institute for Research and Electronics and Applied Physics, Co-founder of the Maryland Cyber Security Center and the Maryland NanoCenter, and project leader at U. California Los Alamos National Laboratory. Please join me in welcoming Patrick.

(Pat speaks)

Overview of Georgia Tech

Earlier this month we commemorated the 10th anniversary of Technology Square, a five-city block area in midtown Atlanta linked to the rest of Georgia Tech's 400-acre campus by a tree-lined bridge that looks more like a park. Once was once a blighted area with underdeveloped real estate, vacant lots and barbed wire is now one of the leading innovation ecosystems in the Southeast. Tech Square is a unique complex of academic, retail and research space. Both startups and established companies are attracted to Tech Square because of the opportunity to be a part of an exciting, innovative environment, including expertise of Georgia Tech's faculty and staff, our research, and access to what we believe are some of the brightest and most innovative students in the world.

One of the buildings is home to 40 startups and dozens of other companies, including global ones. In August, AT&T opened the AT&T Foundry innovation center, the fourth in the world. Georgia Tech and AT&T share a common focus on innovation and already partner in a number of areas. Other companies include Panasonic with their Automotive Innovation Center, GM, EY, formerly Ernst and Young, Penguin Computing, and ThyssenKrupp Elevator America. It is a testament to what is possible through partnerships between higher education, government, business, and industry.

Most of these companies are working closely with Georgia Tech's Enterprise Innovation Institute, or EI₂, Georgia Tech's primary business outreach and economic

development organization. It focuses on commercialization, entrepreneurship and connection to the existing business sector to help drive technology-based economic development.

A key program in EI₂ is Georgia Tech's Advanced Technology Development Center, or ATDC, which has helped launch more than 140 companies that, together, have created thousands of jobs and attracted more than \$2 billion in investment. This year ATDC was named by Forbes magazine as one of 12 business incubators that are "Changing the World."

We have taken numerous steps to enhance and expand the impact of commercial research at Georgia Tech. Industry partnerships are important because they add a real-world dimension to university research and education by offering insight into relevant problems, access to technologies and facilities and for university researchers, and funding, as well as learning opportunities and future employment for students. VentureLab identifies discoveries and technologies in Georgia Tech's research labs that have commercial potential and helps move them quickly to market. It was ranked No. 2 globally by Stockholm-based UBI Index.

Georgia Tech is engaged in high-impact, real-world research and economic development. Tech's research and economic development activities have been organized into Interdisciplinary Research Institutes, including the Georgia Tech Research Institute, or GTRI, that bring together a mix of researchers spanning colleges, departments and individual labs, around 12 research — including areas like big data, bioengineering and bioscience, electronics, energy, manufacturing, materials, and nanotechnology.

Georgia Tech partners internationally on everything from research and teaching to logistics. We have partnerships in more than 30 countries and campuses and

operations in France, Ireland, Costa Rica, Panama, and China. We have several international research and education platforms, dual degree programs with numerous international universities, and more than 100 international agreements with top universities around the world. Georgia Tech students represent 118 countries. More than 43 percent of our students have a study or work abroad experience before graduating.

This month we are celebrating France Atlanta, a celebration that includes scientific symposiums, business workshops, cultural expressions and humanitarian events.

We're also partnering with business and industry in France.

We have a long-standing partnership with CNRS, the largest agency in Europe for fundamental scientific research. We have created a joint international laboratory with a presence in Metz, France, and in Atlanta. This laboratory has received significant funding from industrial sponsored projects and creates opportunities for Georgia Tech's global footprint in Europe.

In three months or so, the new building for the Lafayette Institute will be completed. The Institute is an Open Innovation Technological Resource Center located next to Georgia Tech Lorrain that will foster industry R&D and innovations in the field of new materials for the opto-electronics industry. The Lafayette Institute will operate in close partnership with Georgia Tech's Institute for Electronics and Nanotechnology, and with Georgia Tech's Enterprise Innovation Institute. It is a great example of Franco-US partnership in global innovation.